

United States Environmental Protection Agency POSITION DESCRIPTION COVERSHEET		1. DUTY LOCATION Durham, NC		2. POSITION NUMBER N040100	
3. CLASSIFICATION ACTION: a. Reference of Series and Date of Standards Used to Classify this Position					
	b. Title	c. Pay Plan	d. Series	e. Grade	f. CLC
Official Allocation	Biologist (Bioinformatics)	AD	0401	00	
4. Supervisor's Recommendation					
5. ORGANIZATIONAL TITLE OF POSITION (if any) Bioinformatic Scientist (Title 42 Category A)			NAME OF EMPLOYEE Logan Everett		
7. ORGANIZATION (Give complete organizational breakdown)			e.		
a. U.S. ENVIRONMENTAL PROTECTION AGENCY			f.		
b. Office of Research and Development			g.		
c. National Center for Computational Toxicology			h. Employing Office Location RTP, NC		
d. Immediate Office			i. Organization Code NC000000		
8. SUPERVISORY STATUS					
<input type="checkbox"/> [2] Supervisor or Manager. Position requires the exercise of supervisory or managerial responsibilities that meet, at least, the minimum requirements for application of the General Schedule Supervisory Guide (GSSG) or similar standards for minimum supervisory responsibility specified in other position classification standards. <input type="checkbox"/> [4] Supervisor. Position meets the definition of Supervisor in 5.U.S.C. 7103(a)(10), but does not meet the minimum requirements for application of the GSSG. <input type="checkbox"/> [5] Management Official. Position meets the definition of Management Official in 5.U.S.C. 7103(a)(11), but does not meet the GSSG definition of Supervisor/Manager or the definition of Supervisor in 5.U.S.C. 7103(a)(10). <input type="checkbox"/> [6] Lead. Position leads a team performing one-grade interval work and meets the minimum requirements for application of Part I of the Work Leader Grade Evaluation Guide (WLGE) or is under a wage system and meets similar minimum requirements as specified by those job standards or other directives of the applicable pay system. <input type="checkbox"/> [7] Team Leader. Position leads a team performing two-grade interval work and meets the minimum requirements for application of Part II of the WLGE. <input checked="" type="checkbox"/> [8] All Other Positions. Position does not meet any of the above definitions. This is a non-supervisor/non-managerial position.					
9. SUPERVISORY CERTIFICATION I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships and that the position is necessary to carry out governmental functions for which I am responsible. The certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.					
a. Typed Name and Title of Immediate Supervisor Reeder Sams, Acting Deputy Director, NCCT			d. Typed Name and Title of Second-Level Supervisor Russell Thomas, Director, NCCT		
b. Signature REEDER SAMS <small>Digitally signed by REEDER SAMS Date: 2018.10.23 09:22:24 -04'00'</small>		c. Date	e. Signature RUSSELL THOMAS <small>Digitally signed by RUSSELL THOMAS Date: 2018.10.22 16:52:07 -04'00'</small>		f. Date
10. OFFICIAL CLASSIFICATION CERTIFICATION: I certify that this position has been classified/graded as required by Title 5, U.S. Code, in conformance with standards published by the U.S. Office of Personnel Management or, if no published standards apply directly, consistently with the most applicable published standards.					
a. Promotion Potential <input checked="" type="checkbox"/> This position has no promotion potential <input type="checkbox"/> If position develops as planned and employee progresses satisfactorily, this position has known promotion potential to grade:					
b. PSB Risk Designation <input type="checkbox"/> 1 Low <input type="checkbox"/> 2 Moderate <input checked="" type="checkbox"/> 3 High Security Clearance Required: <input type="checkbox"/> Yes <input type="checkbox"/> No		c. Financial Disclosure Form <input checked="" type="checkbox"/> OGE-450 Required <input type="checkbox"/> OGE-278 Required <input type="checkbox"/> No financial disclosure forms required		d. "Identical, Additional" (IA) Allocation This position <input type="checkbox"/> may be IA'ed <input type="checkbox"/> may not be IA'ed <input checked="" type="checkbox"/> is limited to current incumbent	
		e. FLSA Determination <input type="checkbox"/> NONEXEMPT <input checked="" type="checkbox"/> EXEMPT* (*check exemption category) <input type="checkbox"/> Administrative <input checked="" type="checkbox"/> Professional <input type="checkbox"/> Executive		f. Functional Classification Code 11	
g. Bargaining Unit Code 8888		h. Check, if applicable: <input type="checkbox"/> Medical Monitoring Required <input checked="" type="checkbox"/> Extramural Resources Management Duties (25% % of time) <input type="checkbox"/> This position is subject to random drug testing ()		i. Classifier's Signature Kim Crum	
				j. Date 11/1/2018	
11. REMARKS Title 42 Category A					

TITLE 42 POSITION DESCRIPTION

**Bioinformatics Investigator
AD-0401-00
National Center for Computational Toxicology
Category A**

Background

The National Center for Computational Toxicology (NCCT) is located in Research Triangle Park, NC and reports to the Assistant Administrator for Research and Development (ORD). The Center is under the supervision of a Director and Deputy Director, who are responsible for the overall planning, implementation and management of a research program in computational toxicology. The NCCT provides scientific leadership, understanding and tools related to the application of mathematical, computational, and statistical approaches to mine, model, and integrate data derived from new technologies in chemistry, biotechnology, and molecular biology in order to improve the Agency's data reporting requirements, priority setting approaches to understanding chemical toxicity, and risk assessment approaches.

Part of the mission of NCCT is to enable regulatory and non-regulatory Agency programs to integrate data from the new technologies and the underlying computational, mathematical, and statistical models used to analyze the data into chemical safety decisions. The successful applicant for this position is a nationally and internationally recognized expert in bioinformatics. This is a 5-year term position under the Agency's Title 42 Program. This term position may be renewed.

Major Duties and Responsibilities

The incumbent is responsible for conducting research and providing leadership for the development and application of bioinformatics approaches to analyze data from high-throughput transcriptomic studies and integrate the information with high-throughput biochemical and cell-based screening assays and *in vivo* toxicity studies to assess the potential health effects associated with environmental chemicals. To perform this function, the incumbent works collaboratively with domain experts in information technology, computational toxicology, computational chemistry, exposure science, molecular and cellular biology, and risk assessment.

The incumbent's research and leadership will result in methods, approaches, and data that have the potential to contribute to the Agency's mission of increasing chemical safety and sustainability for the protection of human health and the environment. In particular, the incumbent applies or develops methods from areas such as bioinformatics, machine learning, statistical or probabilistic modeling, and data visualization to process data collected by NCCT, identify patterns, and construct predictive signatures that chemical regulators, researchers, and practitioners use to inform the hazard-related properties of chemicals or as an adjunct to mode of action in risk assessment.

The incumbent will develop tools, approaches, and data for use and application by researchers and scientists, and support the broader needs of environmental regulators, policy-makers and other environmental stakeholders. The incumbent is expected to work with EPA senior

leadership to provide technical direction that integrates ORD's chemical safety and sustainability research across Agency initiatives, and establishes a robust scientific capacity that supports multidisciplinary Agency applications.

In addition to conducting and leading a research program, the incumbent uses his or her expertise to help the Agency identify critical research and technical issues involved with bioinformatics and large-scale data analysis operations. These efforts assist the Agency in assessing the broader research needs in bioinformatics and in evaluating grants, partnerships, and other collaborative research approaches to effectively advance solutions in this scientific area.

The incumbent is a hands-on researcher and capable of producing scientific publications, advancing the state of the science, and developing new research programs. The Agency's research is held to high levels of public scientific review, and the products of the incumbent are subject to external peer review.

The incumbent serves as a spokesperson/representative for ORD in the area of bioinformatics, including participation on workgroups within and outside EPA.

The incumbent serves as an advisor to the NCCT Director and Deputy, as well as the broader ORD, on bioinformatics issues. The incumbent provides guidance, training, and support in these subject areas to scientists within NCCT and throughout EPA in their application to chemical safety and agency policy-setting. As a scientist in NCCT, the incumbent has responsibilities representing the NCCT, ORD and the Agency in relevant outside activities, particularly in the translation of these activities to the fields of toxicology, exposure science and risk assessment. The incumbent must demonstrate proficiency in identifying and building successful collaborations and partnerships both within and outside of the Agency that can leverage the innovation, resources and skills of a multidisciplinary team.

Extramural Resources Management

The incumbent may manage extramural grants and contracts pertaining to their research interests and area of expertise. Extramural resources management is expected to consume less than 5% of the incumbent's time.

Supervisory Controls

The supervision provided to the incumbent is usually limited to administrative guidance. The nature of the supervisory relationship is characterized by a high degree of confidence in and reliance on the incumbent's productivity, competence, and judgment such that there is an unusual level of support for his/her recommendations and most novel investigations. The incumbent is recognized by management as a distinguished and brilliant scientist and is responsible for planning, designing and carrying out research projects, studies, programs or other work independently. Interpretations, recommendations and conclusions made by the incumbent which have major impact on matters of great urgency and significance are furnished to other agencies and the professional community without reference to or knowledge of higher authority in the Agency.

Qualifications and Scientific Contributions

The incumbent has a doctoral degree (PhD or DSc) in bioinformatics, genomics, genetics, biology, or computer science. The incumbent may have a degree in a related field, but must have experience in bioinformatics and the analysis of transcriptomic data. The incumbent should also be sufficiently knowledgeable in biology and chemistry to communicate with domain experts in computational chemistry, toxicology, and molecular and cellular biology. The incumbent should have a demonstrated record of exceptional work in the field of bioinformatics and a high degree of productivity. The incumbent should exercise leadership of a productive research team, or leadership in the conception and formulation of productive research ideas (e.g., has been the basis for productive studies by others), or performs highly productive personal research of such originality, soundness, and value as to be recognized as a significant contributor to his/her professional field. Selected to serve in roles in workshops, symposia and other professional groups. The incumbent beginning to be sought out for consultation by colleagues who also are professionally mature researchers. For example, has authored publications of considerable interest and value to research field (e.g. favorable reviews, citations in the work of others; paper presentations before professional societies).